(i) dividing a culture comprising said bacteria into at least a first sample, a second sample and, optionally a third sample,

(a) lysing bacteria in said first, or optional third, sample, without further culturing of said sample, in the absence of said reagent, to form a lysed sample, and measuring the amount of any adenylate kinase (AK) present in said lysed sample,

(b) incubating said first, or optional third, sample, which has not been treated in step (a), in the absence of said reagent, to form an incubated sample, lysing bacteria in said incubated sample to form a lysed-incubated sample, and measuring the amount of any AK present in said lysed-incubated sample,

(ii) incubating said second sample in the presence of said reagent to form an incubated mixture, lysing bacteria in said incubated mixture to form a lysed-incubated mixture, and measuring the amount of any AK present in said lysed-incubated mixture; and

(iii) comparing the measured amount of any AK present in (i) with the measured amount of any AK present in (ii) to determine the susceptibility of said bacteria to the reagent; wherein,

when the measured amount of AK present in the sample of (i)(b) is greater than the measured amount of AK present in the sample of (ii), then the bacteria are susceptible to said reagent, the magnitude of such a difference being indicative of the degree of susceptibility of said bacteria to said reagent wherein a larger difference is indicative of a greater susceptibility; and

when the measured amount of AK present in the sample of (ii) is greater

than the measured amount of AK present in the sample of (i)(a), then the magnitude of the difference between the AK content of the sample of (ii) and (i)(a) indicates the degree of susceptibility of bacteria to said reagent wherein a smaller difference is indicative of a greater susceptibility.

14. (Amended) A method according for determining the sensitivity of a bacteria to a lytic antibiotic, said method comprising the steps of (i) separating said bacteria from other microbial species (ii) determining the extracellular adenylate kinase content of a culture of said bacteria (iii) adding the lytic antibiotic to the culture and incubating it for a period sufficient to allow the antibiotic to exert its lytic effect, and (iv) determining the extracellular adenylate kinase content of the culture to assess whether lysis has taken place, wherein a greater amount of extracellular adenylate kinase in step (iv) as compared with step (ii) indicates said bacteria is sensitive to the lytic antibiotic.

17. (Amended) A method for determining the sensitivity of a bacteria to a non-lytic antibiotic or biostatic agent, said method comprising (i) separating said bacteria from other microbial species, (ii) incubating a culture of said bacteria in the presence of said non-lytic antibiotic or biostatic agent (iii) determining whether the total adenylate kinase content of the culture increases or decreases over the period of the incubation by removing samples at spaced time periods, lysing bacteria in these samples and assaying for adenylate kinase in said